

## **ABSTRACT**

### **Applicants' Passive Radar Detector for Dualizing Missile Seeker**

Capability incorporates passive RF detectors into a standard active MMW seeker missile with a minimum requirement for hardware modifications. Anti-radiation homing (ARH) antennas and down conversion elements are added to the missile and coupled to existing signal-processing hardware. The added antennas intercept the air defense radar emission signals and the conversion elements convert the intercepted signals to the intermediate frequency (IF) usable by the MMW radar. The IF can then be processed by signal processor that already exists as a part of the MMW seeker.